

**ABSTRACT**

A method and apparatus for a semiconductor device having a semiconductor device having increased conductive material reliability is described. That method and apparatus comprises forming a conductive path on a substrate. The conductive path made of a first material. A second material is then deposited on the conductive path. Once the second material is deposited on the conductive path, the diffusion of the second material into the conductive path is facilitated. The second material has a predetermined solubility to substantially diffuse to grain boundaries within the first material.